

HANDOFF CONTROL IN AN ENTERPRISE CODE DIVISION MULTIPLE ACCESS WIRELESS SYSTEM

ABSTRACT OF THE DISCLOSURE

A wireless office communication system including a wireless internet base station (WIBS) encompassing a base station controller, a mobile switch controller and an ethernet interface module for coupling the WIBS to an existing internet protocol (IP) based network. A wireless office communication system can also be based on the conventional architecture comprising the BTS, BSC and MSC. The WIBS or BTS is attached to a number of antennas via different and identifiable delay elements for the purpose of determining the serving antennas of mobile communication units. A location determination logic enables the system to handle handoffs between a WIBS or BTS and the external public communication system in an optimum manner. Handling handoff requests in this manner prevents unnecessary ping-ponging of handoff and can also increase the percentage of successful handoff by frequency monitoring of the quality of the mobile communication units located in the handoff transition area, particularly to the public communication system.